

(C) WPI/Derwent

AN - 1993-216827 [27]

A - [001] 014 03& 04- 040 05- 06- 074 075 076 081 085 101 143 15- 150 19-
 229 231 239 26- 273 303 305 311 331 341 353 359 38- 43& 44& 473 477
 48- 516 521 54& 541 542 546 547 548 551 560 561 58& 58- 597 600 601
 609 623 627 628 645 656 659 681 688 723

AP - JP19910304350 19911120

CPY - DNIN

DC - A18 A81 A82 A96 D21 G02 G03 L03

DR - 1739-P

FS - CPI

IC - C08F2/44 ; C09C3/08 ; C09D5/00 ; C09D11/00 ; C09D133/14

KS - 0034 0036 0037 0066 0206 0218 0220 0222 0224 0228 0231 0499 0604 0906
 1288 1294 1306 2016 2020 2021 2194 2198 2208 2300 2307 2308 2593 2601
 2604 2608 2622 2660 2682 2718 2740 2765 2812 3205 3252 3289

MC - A08-E02 A08-M01 A11-C02B D08-A02 G02-A03 G02-A04A G03-B02 L03-A L03-J

PA - (DNIN) DAINIPPON INK & CHEM KK

PN - JP5140208 A 19930608 DW199327 C08F2/44 009pp

PR - JP19910304350 19911120

XA - C1993-096436

XIC - C08F-002/44 ; C09C-003/08 ; C09D-005/00 ; C09D-011/00 ; C09D-133/14

AB - J05140208 Irradiation-curable compsns. contain (i)

radically-polymerisable cpds. having double bonds and (ii) inorganic pigments. The improvement is that the pigment is surface-treated with water-insol. divalent cationic metal salts of organic carboxylic acid.

- 'W = gp. (a) - (d), R1 = -H, -CH₃; R2, R3 = -H, 1-3 C alkyl, both R2 and R3 may be joined to form 6 membered cyclic hydrocarbon; X = 2-4 C alkylene; n = 5-15'.

- The organic carboxylic acid includes cpd. of formula (I), (II), polyamide-polyacrylate, polyesteracrylate or polyurethaneacrylate.

- USE/ADVANTAGE - The compsn. have improved adhesivities, and printing characteristics. Lower shrinking properties are obtd. The compsn. is used for coating materials, inks, adhesives or composite resins for teeth.

- In an example 150 ml of beta-acryloyloxyethylmonophthalate and 1000 ml of 0.5 mol:Na₂SO₄ aq. solution were charged in a 3 L: flask kept at 75 C. 1100 ml of 0.5 mol:BaCl₂ aq. solution kept at 75 C was added and agitated for 1 hr. to produce the surface-treated hydrophobic BaSO₄. 30.0 pts.wt. of the surface-treated BaSO₄, 0.5 pts.wt. of beta-phthalocyanine blue, 61.3 pts.wt. beta-acryloyloxyethyl monohexahydrophthalate, 1.4 pts.wt. of 1-hydroxycyclohexyl phenyl ketone, 0.3 pt.wt. of 2-ethylanthraquinone, 2.0 pts.wt. of phenoxyethylacrylate, 2.0 pts.wt. of silicone KS66 and 2.5 pts.wt. of polyvinylpyrrolidone was mixed to give the irradiation-curable coating materials. The mixt. was coated on a PCB and irradiated with an Hg lamp (120 W/cm), cured membrane having good hardness, glossiness and resistance to a developing agent was obtd.

- (Dwg.0/0)

IW - IRRADIATE CURE RESIN COMPOSITION COATING INK ADHESIVE ARTIFICIAL TOOTH COMPRIZE UNSATURATED RADICAL POLYMERISE COMPOUND INORGANIC PIGMENT SURFACE TREAT WATER INSOLUBLE DIVALENT CATION METAL SALT

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NC - 001

OPD - 1991-11-20

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ORD - 1993-06-08

PAW - (DNIN) DAINIPPON INK & CHEM KK

TI - Irradiation curable resin compsns. for coatings inks, adhesives and
artificial teeth - comprise unsatd. radically polymerisable cpds. and
inorganic pigments surface treated with water insol. divalent cationic
metal salts